

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (new): A system for capturing embolic or foreign material in a vessel, comprising:

- an elongate wire having a proximal end and a distal end;
- a capturing device operatively connected to the elongate wire, having an expanded condition and a contracted position, the capturing device further having an inner surface and an outer surface;
- a plurality of first struts attached to the capturing device inner surface and a plurality of second struts attached to the capturing structure outer surface;
- the first and second struts further comprising at least a portion of a helical configuration; and
- the capture device assuming a self folding position in the contracted condition as both the first and second struts rotate with respect to the other struts.

Claim 2 (new): The system of claim 1, wherein the capture device expands radially with respect to the elongate wire into a generally parachute-like member having a proximal end and a distal end, the proximal end further comprising an orifice or plurality of orifices through which blood can flow.

Claim 3 (new): The system of claim 1, wherein the first and second struts further comprising a proximal and distal end, the helix being configured at the proximal end thereof.

Claim 4 (new): The system of claim 1, wherein the first and second struts are configured in an alternating pattern when in an expanded configuration.

Claim 5 (new): The system of claim 1, wherein the first and second struts are biased radially outward.

Claim 6 (new): The system of claim 1, wherein the first struts are attached to the elongate wire.

Claim 7 (new): The system of claim 1, wherein the second struts are attached to the elongate wire.

Claim 8 (new): The system of claim 1, the first struts and the second struts further comprising nitinol.

Claim 9 (new): The system of claim 1, wherein the first and second struts move relative to each other during contraction.

Claim 10 (new): The system of claim 1, wherein the first and second struts move in the same direction during contraction.

Claim 11 (new): The system of claim 1, further comprising an elongate tubular member having a proximal end and a distal end.

Claim 12 (new): The system of claim 1, the capture device further comprises an orifice, wherein the orifice can be made to contract by retracting the distal end of the elongate wire member with respect to the elongate tubular member.

Claim 13 (new): The system of claim 1, the capturing device further comprising a semi-permeable membrane.

Claim 14 (new): The system of claim 1, the capturing device comprising a mesh structure.

Claim 15 (new): The system of claim 1, the capturing device further comprising at least one pore that is sized to allow the substantially unimpeded flow of blood therethrough.

Claim 16 (new): The system of claim 1, wherein the elongate tubular member is a microcatheter.

Claim 17 (new): The system of claim 1, the capturing device further comprising a knitted structure.

Claim 18 (new): An apparatus that captures embolic or foreign material in a vessel, comprising:

a capturing device having an inner surface and an outer surface; and

a plurality of first struts attached to the capturing device inner surface and a plurality of second struts attached to the capturing structure outer surface.

Claim 19 (new): A method for refolding and atraumatically retracting an embolic capturing device after deployment into a vessel, comprising:

providing a parachute-like capture device having an inner surface and an outer surface, a capturing structure operatively connected to an elongate wire, the capture device further including a frame having a plurality of first struts attached to the inner surface and a plurality of second struts attached to the outer surface which expand radially, wherein the first and second struts having a proximal and distal end are configured in an alternative pattern where one first strut is dispersed between two second struts;

contracting the capture device by retracting the elongate wire proximally within a catheter wherein the second struts having at least a portion of a helical configuration at the proximal end rotate relative to the first strut thereby folding the parachute-like capture device and retaining the captured material; and

retracting the refolded capture device within the catheter.

Claim 20 (new): The method of claim 19, wherein the first struts further comprising at least a portion of a helical configuration at the proximal end rotate relative to the second strut thereby folding the parachute-like capture device.

Claim 21 (new): The method of claim 19, wherein the first and second struts move relative to each other during contraction.

Claim 22 (new): The method of claim 19, wherein the first and second struts move in the same direction during contraction.